NORTEL

Business Communications Manager

Data Migration Manager

User Guide

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1.0 Document Information

1.1 Revisions

Table 1 - User Guide Revisions

Issue	Change Summary	Author(s)	Date
Issue 1.0	Issue released post iPor review.	Karl Blomquist	10-11-2009
Draft 00.03	Draft released for iPor review.	Karl Blomquist	06-11-2009

1.2 Organization

This document is a User Guide for the Nortel SMB Data Migration Manager (DMM) tool.

This document includes:

- An overview of DMM (Section 2)
- A description of the requirements and how to run DMM (Section 3)
- A list of pre-DMM *source* and *target* system examinations and/or adjustments (Section 4)
- A detailed illustrated DMM use guide – step by step (Section 5)
- A Quickstart DMM guide – 1 page, 5 steps (Section 6)
- A detailed list of DMM exceptions and/or limitations per system type (Section 7)
- A guide to getting DMM support (Section 8)
- A glossary of terms (Section 9)
- A detailed set of per system type requirements and compatibility details (Appendix A)

Many sections in the document are preceded by "summary points". For example,

⇒ Obtained from *target* BCM's Application Launcher

These points serve as "refresher" cues or highlights regarding what information the section presents in detail.

2.0 Data Migration Manager Overview

2.1 Introduction

⇒ Quickstart? See Section 6.0

If the reader is already familiar with installing and using the Data Migration Manager (DMM) then you may prefer to skip to Section 6.0 for the Quickstart guide to using DMM. If you have not used DMM before, it is highly recommended that you review this guide in its entirety before you attempt to use DMM.

2.2 What Is DMM?

⇒ Time saving tool to migrate, configuration and user data from one system type to another system type for which there is no traditional upgrade

The Business Communications Manager (BCM) Data Migration Manager is a standalone desktop tool developed to facilitate the best-effort migration of system OA&M, configuration, and end-user data between Nortel SMB platforms. The tool's primary objective is to handle telephony and unified messaging migration thus eliminating repetitive, error prone, and time consuming manual configuration setup. In some situations not all system data can be automatically migrated using DMM, so the installer may have certain manual steps to perform after using the tool.

To summarize, the DMM tool is used to ***extract*** data from one Nortel SMB platform ***source*** (e.g., a BCM 4.0) and then convert that data to equivalent data that can be ***applied*** to another Nortel SMB platform ***target*** (e.g., BCM 5.0).

The table below lists the current Nortel SMB product to BCM migration paths that DMM supports as of December 2009.

Table 2 - DMM Migration Paths Currently Supported

Nortel SMB Platform *source*	Nortel SMB BCM *target*	Additional Information
BCM 200/400/1000 chassis Release 4.0	BCM 450 (2 or 4 MBM chassis) Release 5.0	• Initial release of the DMM tool. • Because of the platform differences the data from BCM 4.0 needs to be extracted and converted before it is compatible and can be applied to the BCM 5.0 platform. • Across these platforms the use of DMM can save the BCM 450 5.0 installer *many* hours (in some cases 10+) over the course of the entire 4.0 to 5.0 h/w and s/w upgrade process. • The Unified Messaging keycode is required on both the *source* and the *target* platforms to perform Voice Mail message migration extract and apply process.

Future revisions of the DMM tool are planned to support additional *source* and *target* combinations (e.g., Norstar to BCM).

2.3 The DMM Migration Procedure

⇒ 1. Extract Data from *source*

⇒ 2. Prepare Data

⇒ 3. Apply to *target*

As illustrated below, the DMM Migration procedure has three major steps. In addition, to the data migration procedure, the physical setup of the new target system with cabling, terminals, licensing and network setup is required. DMM system migration is intended as an off-line maintenance activity.

1. ***Extract*** data from the ***source*** platform.

Figure 1 - Depiction of a DMM *Extract* from a BCM 400 *source*

2. ***Prepare*** the Extracted Data

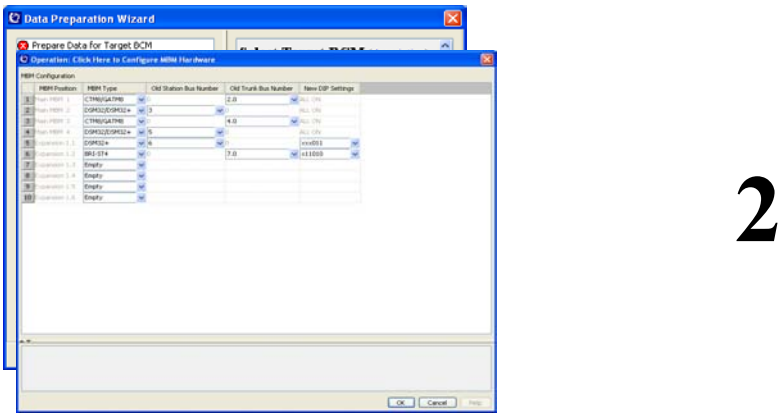


Figure 2 - The DMM Data Preparation Windows

3. ***Apply*** the Data to a ***target*** BCM platform

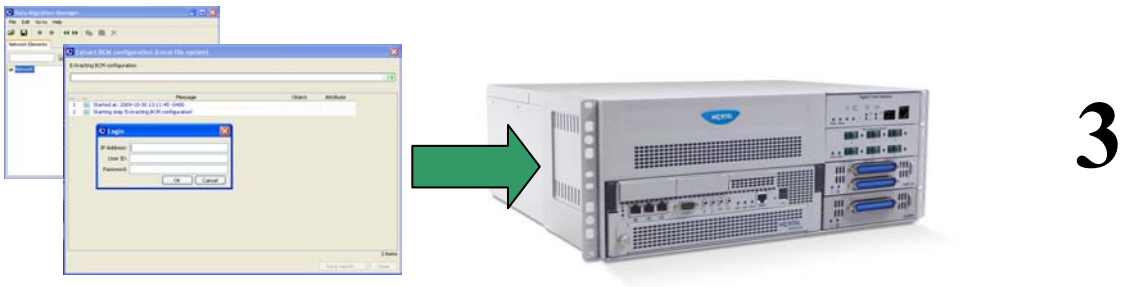


Figure 3 - Depiction of a DMM *Apply* to a BCM 450 (4 MBM) *target*

3.0 DMM Requirements and Installation

3.1 System Requirements

⇒ Windows PC

⇒ 175MB disk space for local install

⇒ 100 MB disk space for each extract/apply data set

The DMM application can be run on a Microsoft Windows XP SP2, Microsoft Windows Vista, and Microsoft Windows 7 desktop platform and requires at least 175MB of disk space to install.

Consideration should also be given to additional disk space for saving extracted data from *source* platforms (an additional 100MB of free disk space per *source* platform is recommended).

The desktop PC that is used to run the DMM tool must have network LAN access to the ***source*** device to perform a data ***extraction***. Similarly, network access to the ***target*** device must be available to perform an ***apply*** operation. To avoid networking issues, if the source device IP address is reused for the target device, then disconnect the source device from the network prior to performing the apply operation (another approach is to use the OAM port connection on the target device to avoid LAN address contention).

3.2 Obtaining DMM

⇒ Obtained through *target* BCM's Application Launcher

DMM is accessible through the *target* BCM's Application launcher which automatically checks for updated versions of the DMM application from the hosting server. The DMM will get installed on your desktop PC and can either be invoked from the Application Launcher screen or from a desktop shortcut. .

Figure 4 - The BCM Application Launcher - DMM

3.3 Interim Installation procedure during trials

⇒ Unzip or execute the self-extracting file onto Windows PC – DMM.bat is starting point

DMM may be released as a single .zip file or as a self-extracting .exe file.

Unzip or execute the self-extracting file to a location of your choice on the Windows PC.

Unzipping/extracting the DMM tool creates a folder that looks similar to:

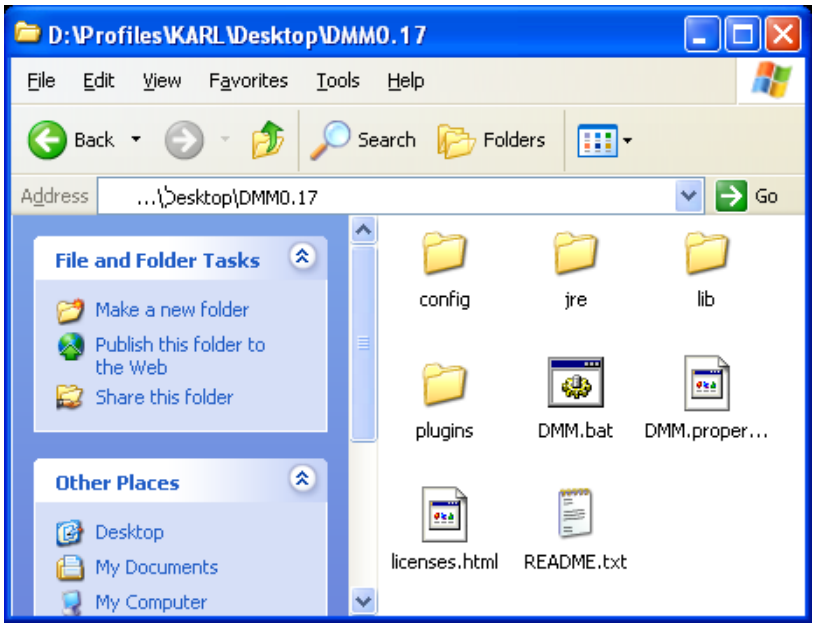


Figure 5 - DMM installation folder

Optionally a shortcut can be created to the DMM tool startup “DMM.bat” in the root of the folder that you unzipped/extracted the DMM tool. “DMM.bat” is the starting point for the DMM tool.

4.0 Pre-DMM System Preparation/Examination

Before using the DMM tool both the *source* and *target* systems must be verified to have a suitable version and configuration for DMM compatibility.

4.1 Compatibility Determination

⇒ Check *source* to *target* Compatibility (e.g., no FEM) – Appendix A.

Although DMM supports a given *source* platform, there may be certain configuration aspects of that *source* platform that will render DMM incapable of accurate data *extraction*.

For a detailed list of unsupported system configurations, see Appendix A – System Compatibility. Determine if there are any unsupported aspects of the intended *source* system before attempting to use DMM.

4.2 Preparing the *Source*

4.2.1 S/W Version

⇒ Up to date s/w version on *source* – Appendix A.

The *source* system must be updated to a minimum DMM supported software version and/or smart update (SU).

For a detailed list of supported *source* system software versions see Appendix A – System Compatibility. Determine if the intended *source* system meets the software version requirements. If not, apply the required software updates before using DMM.

4.2.2 *Source* System Not In Use and Off-line

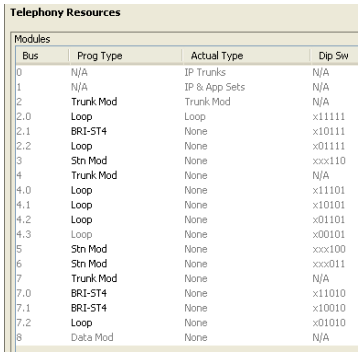
⇒ Ensure *source* not currently in use

Although extracting data from the *source* system is not a destructive operation, the *source* system should not be a live or in-use system during the *extract* process. A backup of the *source* system will be performed before the *extract* begins and a restore operation will be performed upon the completion of the *extract*. Because of these operations services to end-users of the *source* system will be interrupted for a period of time.

4.2.3 Physical System Organization

⇒ Determine physical configuration of *source* (e.g., MBM locations, split?)

Note the *source* system's physical device (MBMs, cards) locations in its main chassis and on any optional expansion chassis.



Telephony Resources

Modules

Bus	Prog Type	Actual Type	Dip Sw
0	N/A	IP Trunks	N/A
1	N/A	IP & App Sets	N/A
2	Trunk Mod	Trunk Mod	N/A
2.0	Loop	Loop	x11111
2.1	BRI-ST4	None	x10111
2.2	Loop	None	x01111
3	Stn Mod	None	xxx110
4	Trunk Mod	None	N/A
4.0	Loop	None	x11101
4.1	Loop	None	x10101
4.2	Loop	None	x01101
4.3	Loop	None	x00101
5	Stn Mod	None	xxx100
6	Stn Mod	None	xxx011
7	Trunk Mod	None	N/A
7.0	BRI-ST4	None	x11010
7.1	BRI-ST4	None	x10010
7.2	Loop	None	x01010
8	Data Mod	None	N/A

Figure 6 - Example H/W Configuration on a BCM 4.0

4.3 Preparing the *Target*

4.3.1 S/W Version

⇒ Up to date s/w version on *target* – Appendix A

The *target* system must be updated to the latest approved DMM supported software version and/or SU.

For a detailed list of supported *target* system software versions see Appendix A – System Compatibility. Determine if the intended *target* system meets the software version requirements. If not, apply the required software updates before using DMM.

4.3.2 *Target* System Not In Use and Off-line

⇒ Ensure *target* not currently in use

*Apply*ing data to the *target* system is a destructive operation, thus the *target* system can not be a live, in-use system during the *apply* process.

4.3.3 IP Address (where applicable)

⇒ Check LAN connections

If the Data Services component's configuration is selected to be migrated, then as part of the *apply* operation the *target's* LAN IP addresses will be changed to match that of the *source* system (if applicable). Because of this, it is recommended that the *source* and *target* system *not* be connected simultaneously on the same LAN during the *apply* process.

The connection to the *target* system for the purposes of DMM *apply* can be made via either the Customer LAN or OAM LAN interface.

4.3.4 Keycodes

⇒ Apply Required Keycodes on *target* to match *source* licensing

It is recommended to apply the necessary Keycodes to the *target* system to enable at least the same set of services and/or resources that existed on the *source* system. If Keycodes are not applied to the *target* system prior to applying then some data may not be migrated.

Note that DMM will perform a comparison of Keycode equivalence on the *source* and *target* systems and if issues are found DMM will notify the user and give an option to continue or cancel the operation(s).

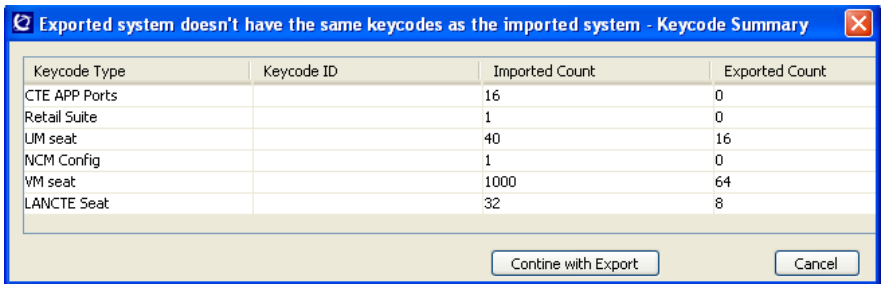


Figure 7 - DMM Keycode Conflict Report

Recall that on certain platforms (see Table 2) *source* and/or *target* Unified Messaging keycodes are required to perform Voice Mail message migration.

5.0 Using DMM – Detailed Walkthrough

5.1 Starting DMM

If using Application Launcher then double click on the DMM application in the list of applications. If using an application desktop shortcut, double click on the icon or for the interim release, double click on DMM.bat in the install folder. DMM starts and presents its home window:

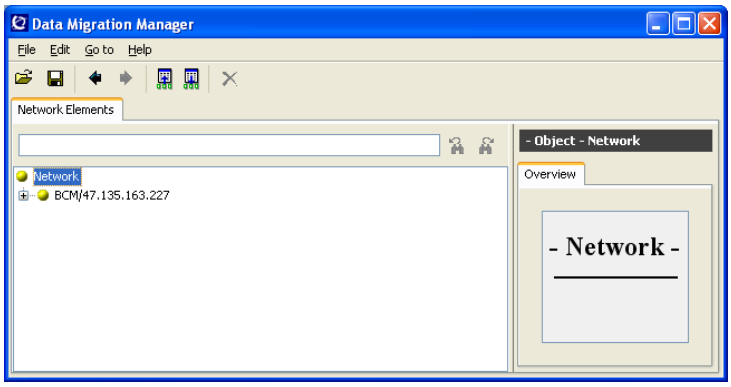


Figure 8 - DMM Home Window

5.2 Extracting Data from a *Source* System

To extract data from a *source* system click on the icon. A new window will open:

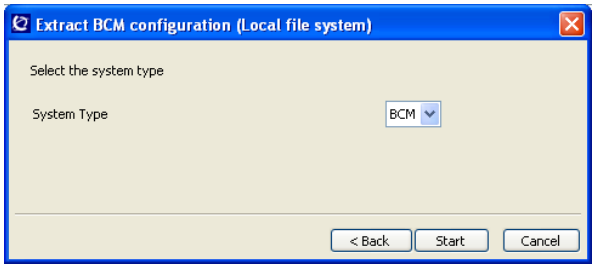


Figure 9 - DMM Select System Type

Choose the *source* system type and click on Next to see a list of this system's data sets that can be extracted:

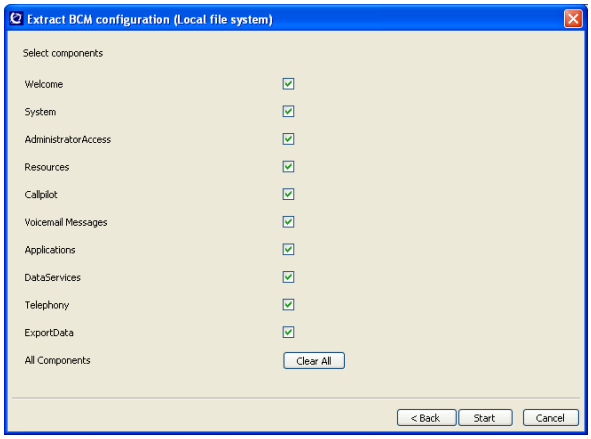


Figure 10 - DMM Select Component Data to Extract

Select what major components of the *source* system you wish to extract data from (the default is *all*). Click on the Start button to be prompted for the system's address and access information. **Note that not all platforms support individual selection options because there may be some inherent dependencies between the components**.

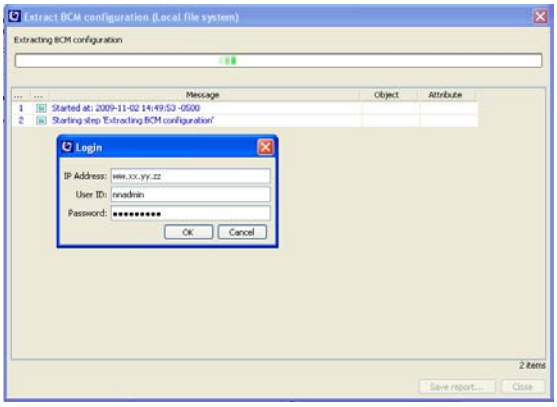


Figure 11 - DMM Specify *source* Location

Enter the *source* system's IP address along with the system's administration user-id and password. Click OK.

DMM will now proceed with the extracting of data from the *source* system. The remainder of this extract process is unattended. Note that at the beginning of this process the *source* system's data will be backed up and then at the end of the process it will be restored.

This process can take from 20 minutes to 45 minutes on average depending on the amount of data on the *source* system. For systems with extremely large amounts of voice-message data it will take a longer time relative to the volume of messages to be extracted.

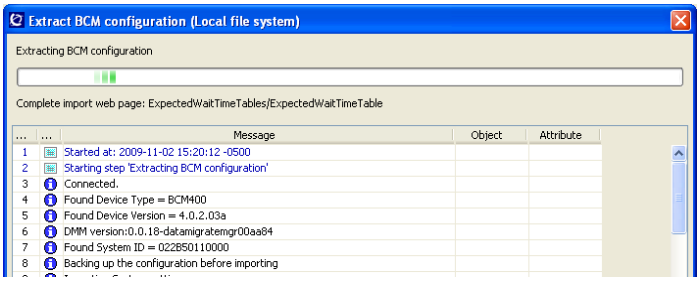

Extract BCM configuration (Local file system)
Extracting BCM configuration
Complete import web page: ExpectedWaitTimeTables/ExpectedWaitTimeTable
Message
Object
Attribute
1 Started at: 2009-11-02 15:20:12 -0500
2 Starting step 'Extracting BCM configuration'
3 Connected.
4 Found Device Type = BCM400
5 Found Device Version = 4.0.2.03a
6 DMM version:0.0.18-datamigratemgr00aa84
7 Found System ID = 022B50110000
8 Backing up the configuration before importing

Figure 12 - DMM Extraction Process 1

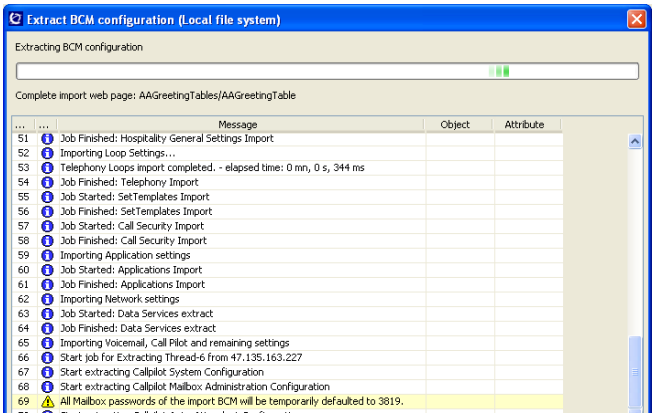

Extract BCM configuration (Local file system)
Extracting BCM configuration
Complete import web page: AAGreetingTables/AAGreetingTable
Message
Object
Attribute
51 Job Finished: Hospitality General Settings Import
52 Importing Loop Settings...
53 Telephony Loops import completed. - elapsed time: 0 mn, 0 s, 344 ms
54 Job Finished: Telephony Import
55 Job Started: SetTemplates Import
56 Job Finished: SetTemplates Import
57 Job Started: Call Security Import
58 Job Finished: Call Security Import
59 Importing Application settings
60 Job Started: Applications Import
61 Job Finished: Applications Import
62 Importing Network settings
63 Job Started: Data Services extract
64 Job Finished: Data Services extract
65 Importing Voicemail, Call Pilot and remaining settings
66 Start job for Extracting Thread-6 from 47.135.163.227
67 Start extracting Callpilot System Configuration
68 Start extracting Callpilot Mailbox Administration Configuration
69 All Mailbox passwords of the import BCM will be temporarily defaulted to 3819.

Figure 13 - DMM Extraction Process 2

Upon completion, DMM will display a notification that provides an overview of the extract results:

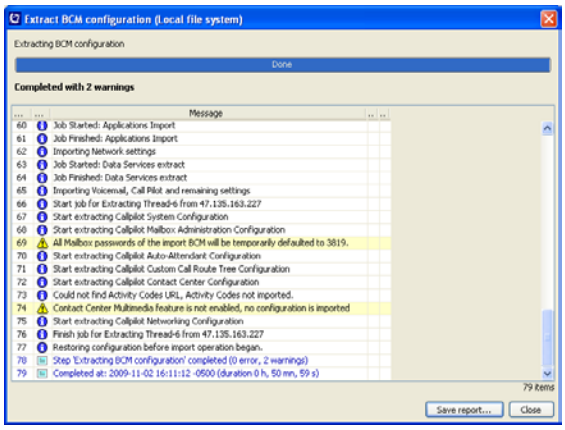


Figure 14 - DMM Extraction Completion Report

5.2.1 Saving the Extract Report [optional]

The report created during the extract process can be saved in a folder. Click on "Save Report" and a window will pop up prompting for a location and name to save the report (in html format).

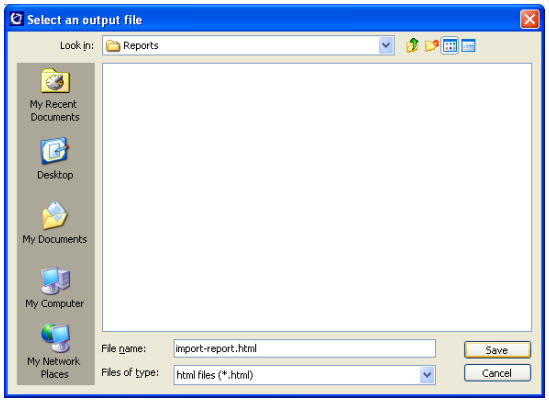


Figure 15 - DMM Save Extraction Report

5.2.2 Saving Extracted DMM Data [optional]

If it is intended to migrate this data to multiple systems, or if it is necessary to return to the DMM process at a later time for the apply portion, DMM can save the extracted data into a folder on the desktop PC. **Although not mandatory, this is a recommended step.**

At the DMM home window level

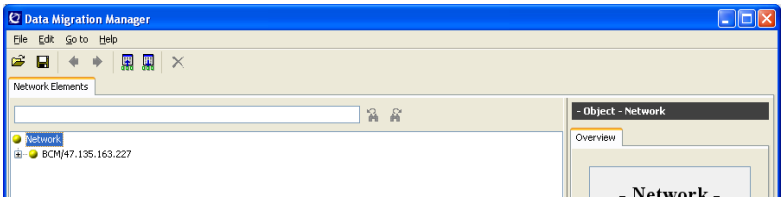


Figure 16 - DMM Home Window

click on the save icon or choose File / Save from the pull-down menus. DMM will prompt for a location to save the extracted data to:

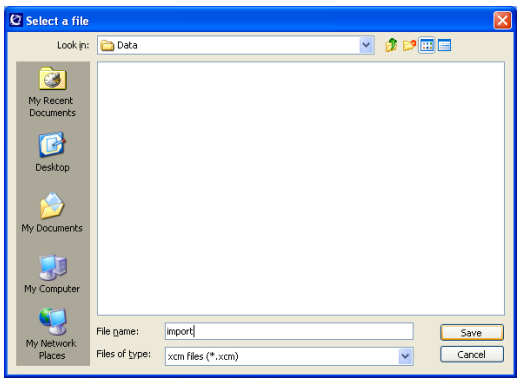


Figure 17 - DMM Save Extracted Data

Click the "Save" button when you have located the folder and defined the file name, DMM will save the extracted data, showing the following progress window:

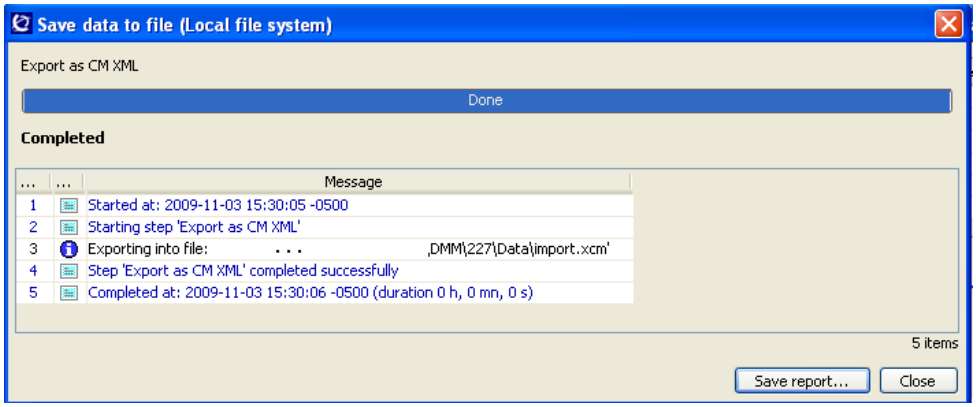

Save data to file (Local file system)
Export as CM XML
Done
Completed
Message
1 Started at: 2009-11-03 15:30:05 -0500
2 Starting step 'Export as CM XML'
3 Exporting into file: ,DMM\227\Data\import.xcm'
4 Step 'Export as CM XML' completed successfully
5 Completed at: 2009-11-03 15:30:06 -0500 (duration 0 h, 0 mn, 0 s)
5 items
Save report...
Close

Figure 18 - DMM Extracted Data Saved

Note that this single saved .xcm file does not contain all of the data to be migrated. There are other parts of the *source* system's data that are stored in the DMM installation folder under the user/data sub-folders. This data will need to remain where it is if it is to be retrieved at a later time.

5.2.3 Retrieving Saved DMM Data

If there is a requirement to load previously saved data (e.g., to perform an apply) click on the icon or select File / Open in the DMM home window:

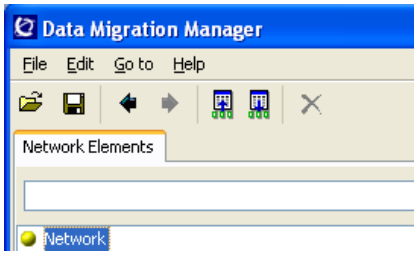


Figure 19 - DMM File Open

If there is currently data loaded in the DMM session DMM will prompt with a window to verify the current data is to be replaced with the saved data being loaded. Click “Next” to continue.

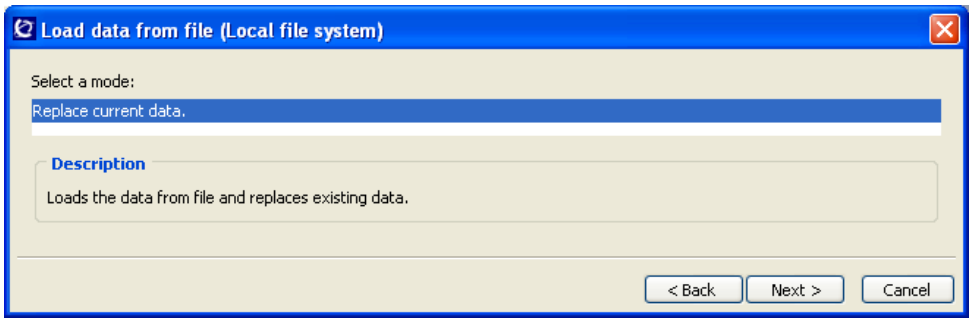

Load data from file (Local file system)
Select a mode:
Replace current data.
Description
Loads the data from file and replaces existing data.
< Back
Next >
Cancel

Figure 20 - DMM Replace Current Data?

DMM will prompt with a request for the data location and file name to be loaded. Enter the path and name and click on “Next”,

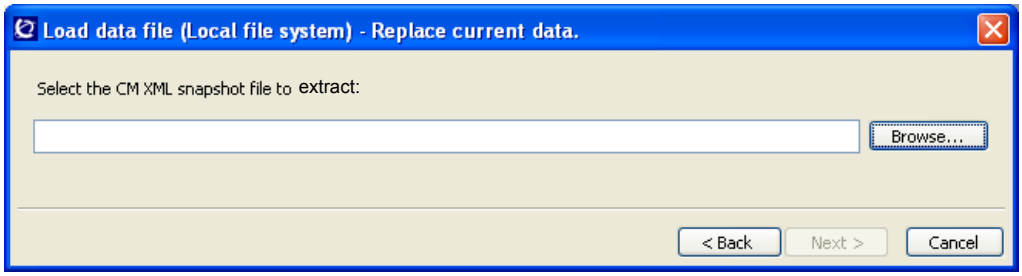


Figure 21 - DMM Load Data Location Request

or alternatively, the user may browse for a saved data set:

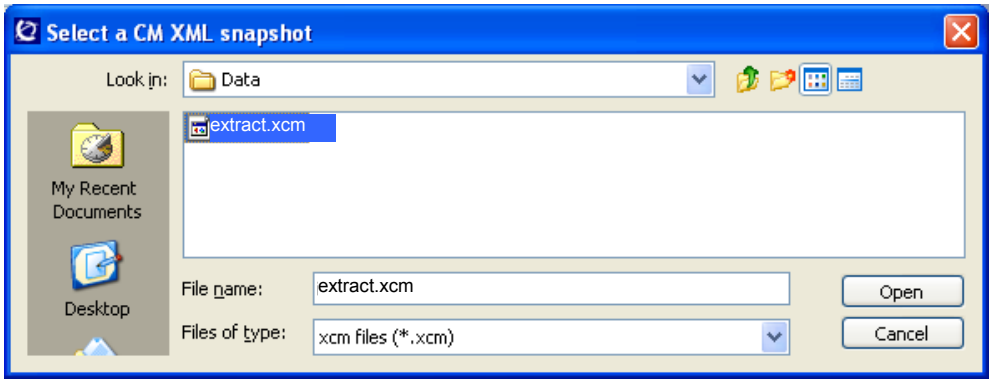


Figure 22 - DMM Browse to Data Location

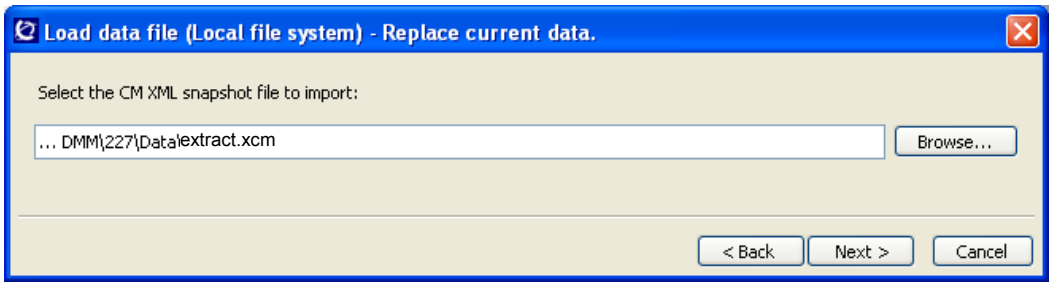

Load data file (Local file system) - Replace current data.
Select the CM XML snapshot file to import:
... DMM\227\Data\extract.xcm
Browse...
< Back
Next >
Cancel

Figure 23 - DMM Load Data Location

After a valid path and name has been entered, and “Next” is clicked, DMM will give the user one more chance to save the existing data set if one exists. Select your choice and then click the “Start” button.

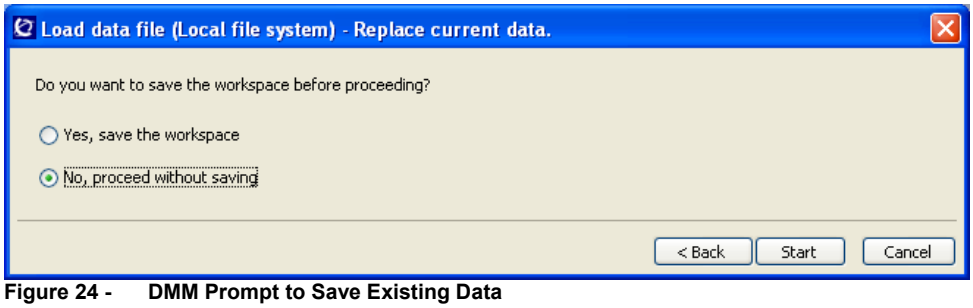

Load data file (Local file system) - Replace current data.
Do you want to save the workspace before proceeding?
Yes, save the workspace
No, proceed without saving
< Back
Start
Cancel

Figure 24 - DMM Prompt to Save Existing Data

DMM will load the saved data set and present a summary of the load operation:

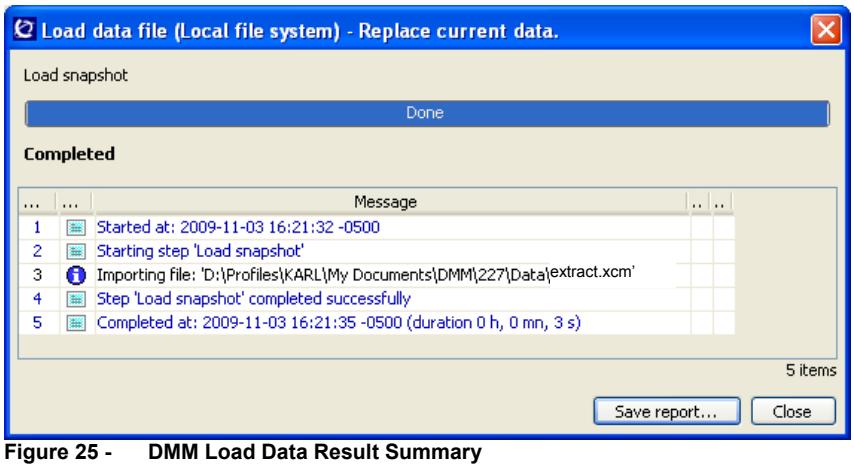

Load data file (Local file system) - Replace current data.
Load snapshot
Done
Completed
Message
1 Started at: 2009-11-03 16:21:32 -0500
2 Starting step 'Load snapshot'
3 Importing file: 'D:\Profiles\KARL\My Documents\DMM\227\Data\extract.xcm'
4 Step 'Load snapshot' completed successfully
5 Completed at: 2009-11-03 16:21:35 -0500 (duration 0 h, 0 mn, 3 s)
5 items
Save report...
Close

Figure 25 - DMM Load Data Result Summary

5.3 Preparing to Apply Data to a *target* System

Applying data to a *target* system can be performed immediately after an extract has been performed, or after a saved data set has been loaded into DMM. However, first the extracted data must be “prepared” using additional information regarding the *source* and *target* system configuration. DMM presents a list of the loaded data sets as sub-nodes under the Network node on the DMM home window. If a sub-node is not visible, double-click the Network node to expand the sub-node list:

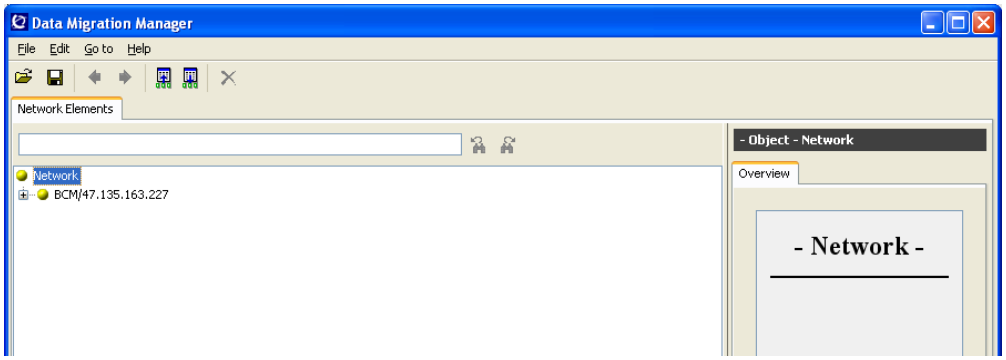


Figure 26 - DMM Home Window

Next click on the sub-node data set applied to a *target* system.

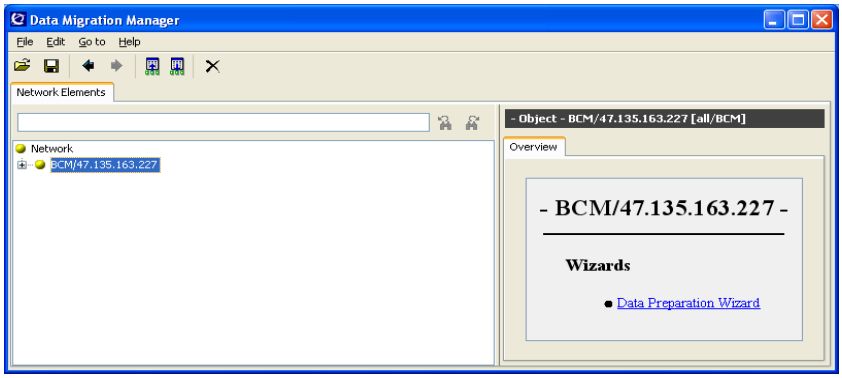


Figure 27 - Starting the Data Preparation Wizard

Note the presentation of the "Data Preparation Wizard". This wizard provides the steps for preparing the loaded data set to be applied to a *target* system. Click on the "Data Preparation Wizard" link to start data preparation.

5.3.1 The Data Preparation Wizard

There are three main steps in data preparation. The first is selecting the type of the *target*.

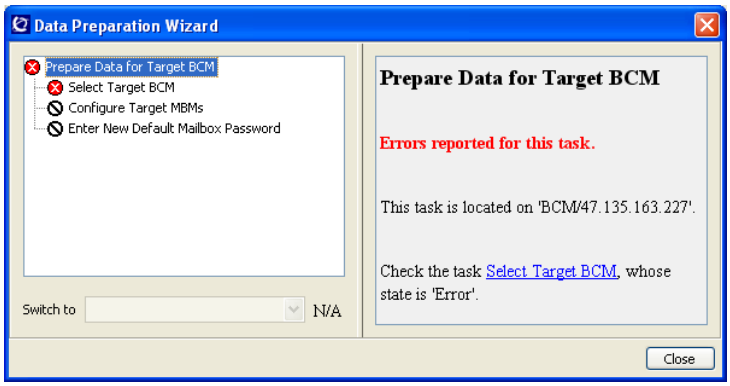

Data Preparation Wizard
Prepare Data for Target BCM
Select Target BCM
Configure Target MBMs
Enter New Default Mailbox Password
Switch to
N/A
Prepare Data for Target BCM
Errors reported for this task.
This task is located on 'BCM/47.135.163.227'.
Check the task Select Target BCM, whose state is 'Error'.
Close

Figure 28 - Data Preparation Wizard Status

Click on the "Select *target* BCM" link and note the following window:

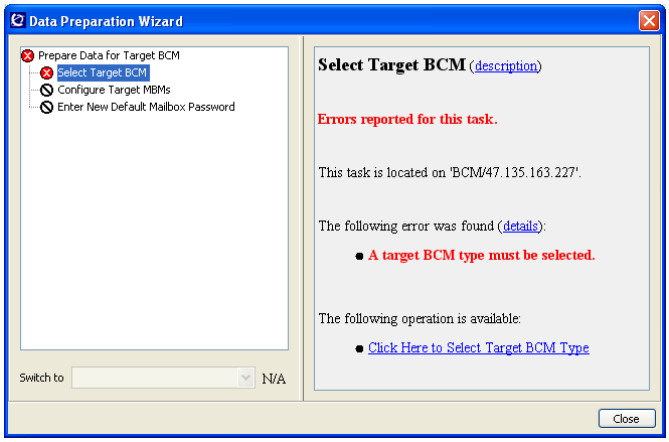

Data Preparation Wizard
Prepare Data for Target BCM
Select Target BCM
Configure Target MBMs
Enter New Default Mailbox Password
Switch to
N/A
Select Target BCM (description)
Errors reported for this task.
This task is located on 'BCM/47.135.163.227'.
The following error was found (details):
A target BCM type must be selected.
The following operation is available:
Click Here to Select Target BCM Type
Close

Figure 29 - Data Preparation Wizard Select *target* BCM

Either the current *target* type will be displayed, or the indication that no *target* type is yet selected. Click on the "Click Here to Select *target* BCM Type" link to choose the *target* type.

Use the pull-down menu presented to choose the appropriate *target* system type and then click "OK".

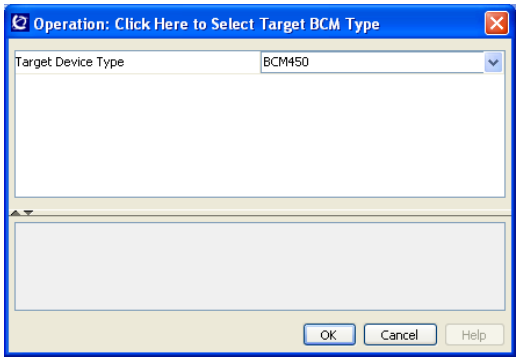


Figure 30 - Data Preparation Wizard Select Device Type

DMM will run a short preparation process based on the selected *target* type:

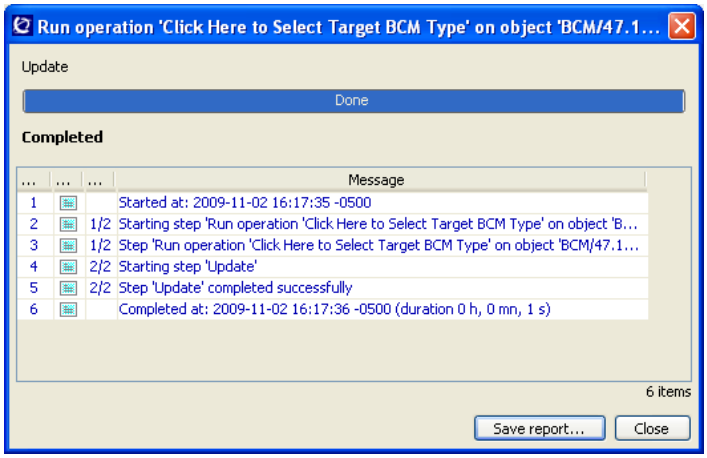

Run operation 'Click Here to Select Target BCM Type' on object 'BCM/47.1...
Update
Done
Completed
Message
1 Started at: 2009-11-02 16:17:35 -0500
2 1/2 Starting step 'Run operation 'Click Here to Select Target BCM Type' on object 'B...
3 1/2 Step 'Run operation 'Click Here to Select Target BCM Type' on object 'BCM/47.1...
4 2/2 Starting step 'Update'
5 2/2 Step 'Update' completed successfully
6 Completed at: 2009-11-02 16:17:36 -0500 (duration 0 h, 0 mn, 1 s)
6 items
Save report...
Close

Figure 31 - Data Preparation Wizard *target* BCM Type Selection Report

Click "Close" then the process is completed. The data preparation window will now indicate that a valid *target* is prepared:

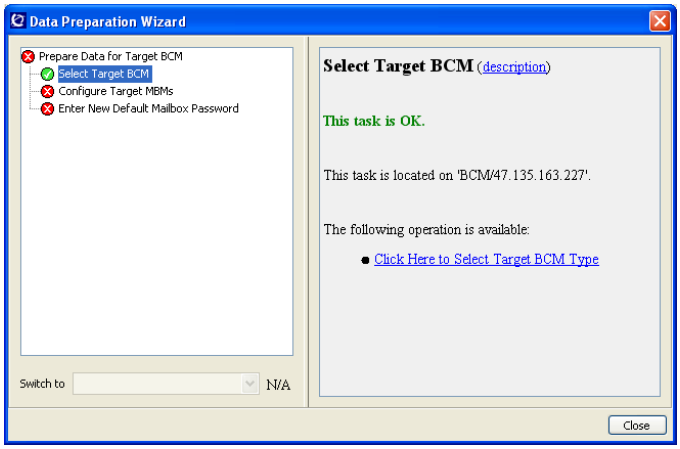


Figure 32 - Data Preparation Wizard *target* BCM Valid

The next step is to configure the hardware (MBMs) on the *target*. To properly perform this step, detailed knowledge of the *source* system's hardware placement is required and if applicable, the DIP settings. In addition, knowledge of the planned location of the hardware and, if applicable, associated DIP settings on the *target* system is required.

Click on the "Configure *target* MBMs" action in the "Data Preparation Wizard" home window. Click on the "Click Here to Configure MBM Hardware" link to choose start the MBM hardware configuration wizard.

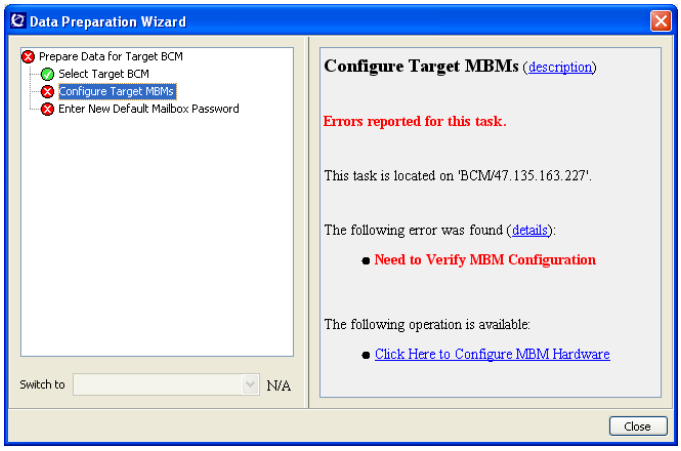

Data Preparation Wizard
Prepare Data for Target BCM
Select Target BCM
Configure Target MBMs
Enter New Default Mailbox Password
Configure Target MBMs (description)
Errors reported for this task.
This task is located on 'BCM/47.135.163.227'.
The following error was found (details):
Need to Verify MBM Configuration
The following operation is available:
Click Here to Configure MBM Hardware
Switch to
N/A
Close

Figure 33 - Data Preparation Wizard Configure *target* MBMs

The MBM Hardware configuration window describes the *source* system's hardware, and where on the *source* system each piece of hardware was located. DMM makes a "best–effort" attempt at identifying all *source* system hardware and associated locations, however it is possible in certain instances for DMM to misunderstand a *source* system's hardware configuration. **It is important for the user to check the MBM hardware configuration presented by DMM and if necessary make adjustments (including possible additions or deletions) to ensure the hardware declaration matches the *source* system**.

Once this step is completed it cannot be repeated. When the t*arget* MBM configuration is chosen and finalized (green) the loaded data associated is modified to fit that declared MBM configuration. Attempting to modify the MBM configuration additional times will result in invalid data. If it becomes necessary to change the MBM configuration again then the *source* data must be reloaded and the Data Preparation Wizard must be re-run.

The following examples illustrate this process for a BCM 4.0 to BCM 5.0 migration in progress.

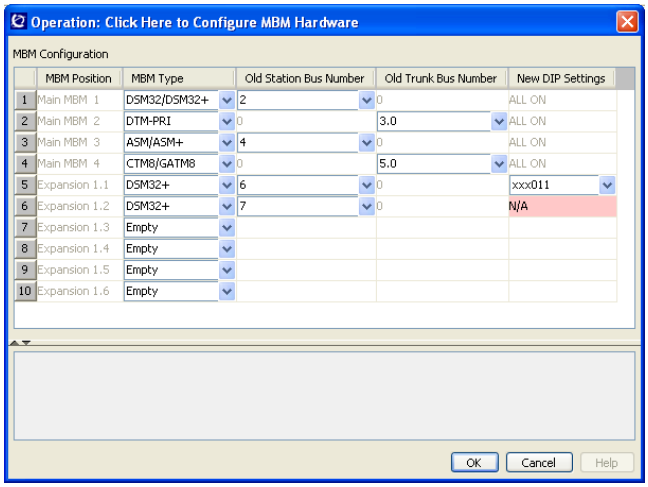

Operation: Click Here to Configure MBM Hardware
MBM Configuration
MBM Position
MBM Type
Old Station Bus Number
Old Trunk Bus Number
New DIP Settings
1 Main MBM 1 DSM32/DSM32+ 2 0 ALL ON
2 Main MBM 2 DTM-PRI 0 3.0 ALL ON
3 Main MBM 3 ASM/ASM+ 4 0 ALL ON
4 Main MBM 4 CTM8/GATM8 0 5.0 ALL ON
5 Expansion 1.1 DSM32+ 6 0 xxx011
6 Expansion 1.2 DSM32+ 7 0 N/A
7 Expansion 1.3 Empty
8 Expansion 1.4 Empty
9 Expansion 1.5 Empty
10 Expansion 1.6 Empty
OK
Cancel
Help

Figure 34 - Data Preparation Wizard Configure *target* MBMs Fields with N/A

This window also defines where on the *target* system the hardware will reside and what associated DIP settings (if any) must be set on the hardware for proper operation in the *target* system.

In some cases DMM may be unable to determine one or more data values for hardware components. In these cases it will indicate an N/A entry in pink (see above example window). For these fields the DMM user must modify the relevant value(s) to reflect the actual value on the *source* system or the actual value intended for the *target* system, whichever is applicable.

An example of modifying DIP settings for hardware on the *target* (row 6).

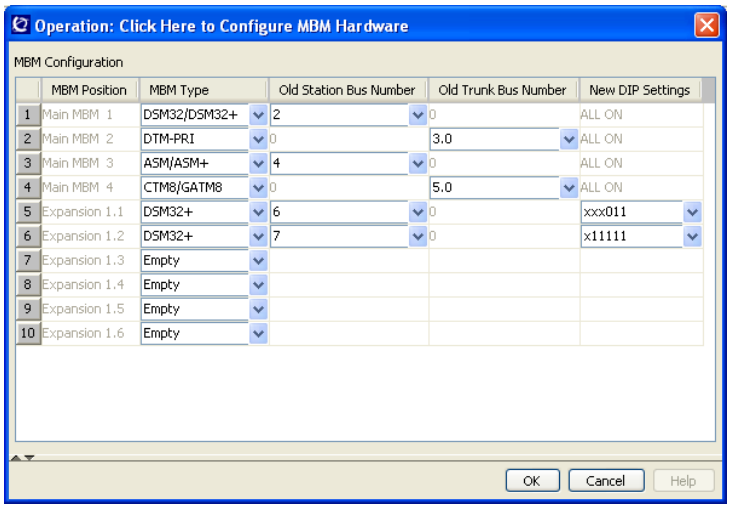

Operation: Click Here to Configure MBM Hardware
MBM Configuration
MBM Position
MBM Type
Old Station Bus Number
Old Trunk Bus Number
New DIP Settings
1 Main MBM 1 DSM32/DSM32+ 2 0 ALL ON
2 Main MBM 2 DTM-PRI 0 3.0 ALL ON
3 Main MBM 3 ASM/ASM+ 4 0 ALL ON
4 Main MBM 4 CTM8/GATM8 0 5.0 ALL ON
5 Expansion 1.1 DSM32+ 6 0 xxx011
6 Expansion 1.2 DSM32+ 7 0 x11111
7 Expansion 1.3 Empty
8 Expansion 1.4 Empty
9 Expansion 1.5 Empty
10 Expansion 1.6 Empty
OK
Cancel
Help

Figure 35 - Data Preparation Wizard Configure *target* MBMs Fields with New DIPs

Another example - adding modules that DMM did not initially present (row 7).

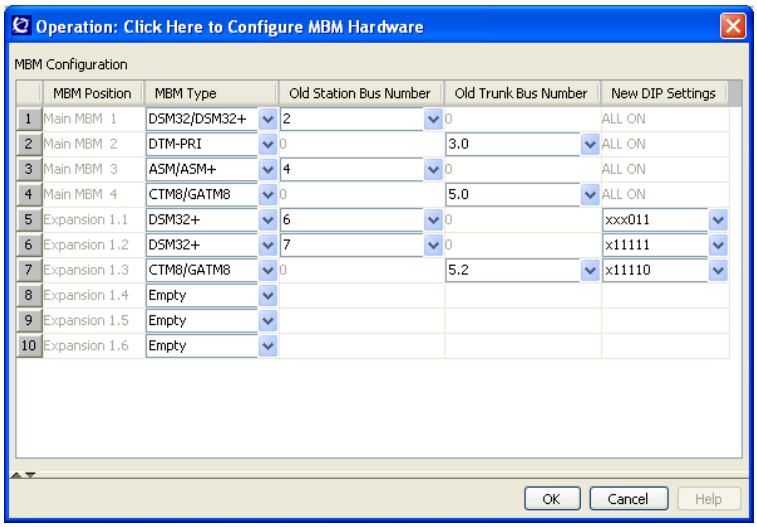

Operation: Click Here to Configure MBM Hardware
MBM Configuration
MBM Position
MBM Type
Old Station Bus Number
Old Trunk Bus Number
New DIP Settings
1 Main MBM 1 DSM32/DSM32+ 2 0 ALL ON
2 Main MBM 2 DTM-PRI 0 3.0 ALL ON
3 Main MBM 3 ASM/ASM+ 4 0 ALL ON
4 Main MBM 4 CTM8/GATM8 0 5.0 ALL ON
5 Expansion 1.1 DSM32+ 6 0 xxx011
6 Expansion 1.2 DSM32+ 7 0 x11111
7 Expansion 1.3 CTM8/GATM8 0 5.2 x11110
8 Expansion 1.4 Empty
9 Expansion 1.5 Empty
10 Expansion 1.6 Empty
OK
Cancel
Help

Figure 36 - Data Preparation Wizard Configure *target* MBMs Fields with Added MBM

5.3.1.1 *Source* and *Target* Hardware Configuration Considerations

There may be differing requirements or restrictions on the *target* system compared to the *source* system regarding hardware or capacity configurations. For example, some hardware that co-existed on the same bus on the *source* may no longer be allowed to co-exist on the same bus on the *target*. In these situations the DMM user may have to modify or declare additional configuration data to ensure conflicts are resolved.

A list of *source* to *target* migration hardware configuration issues to be considered is presented in Appendix A.3.

When the MBM hardware configuration declaration is satisfactory click the "OK" button and DMM will proceed to prepare the data set based on the declared hardware. A summary of this preparation and its impacts will be presented in a window.

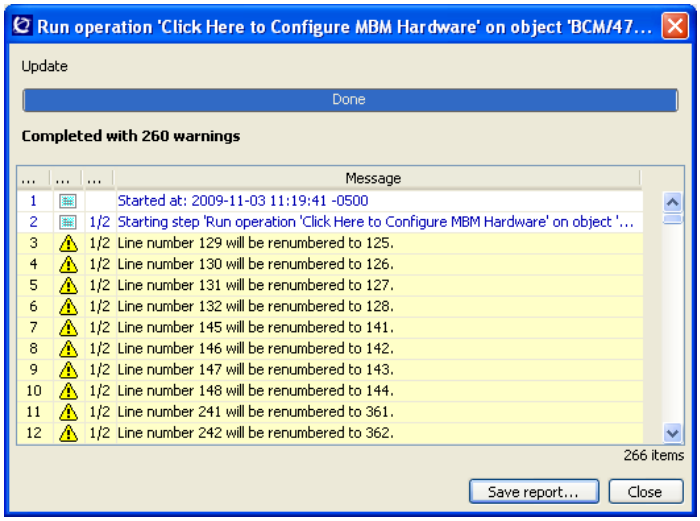

Run operation 'Click Here to Configure MBM Hardware' on object 'BCM/47...
Update
Done
Completed with 260 warnings
Message
1 Started at: 2009-11-03 11:19:41 -0500
2 1/2 Starting step 'Run operation 'Click Here to Configure MBM Hardware' on object '...
3 1/2 Line number 129 will be renumbered to 125.
4 1/2 Line number 130 will be renumbered to 126.
5 1/2 Line number 131 will be renumbered to 127.
6 1/2 Line number 132 will be renumbered to 128.
7 1/2 Line number 145 will be renumbered to 141.
8 1/2 Line number 146 will be renumbered to 142.
9 1/2 Line number 147 will be renumbered to 143.
10 1/2 Line number 148 will be renumbered to 144.
11 1/2 Line number 241 will be renumbered to 361.
12 1/2 Line number 242 will be renumbered to 362.
266 items
Save report...
Close

Figure 37 - Data Preparation Wizard Configure *target* MBMs Report

After viewing and/or saving this summary click on "Close" to return to the "Data Preparation Wizard" home window. At this stage, the Configure Target MBMs sub-node should be green. **Do not attempt to perform the Configure Target MBMs step again – doing so will corrupt the current data migration in progress.**

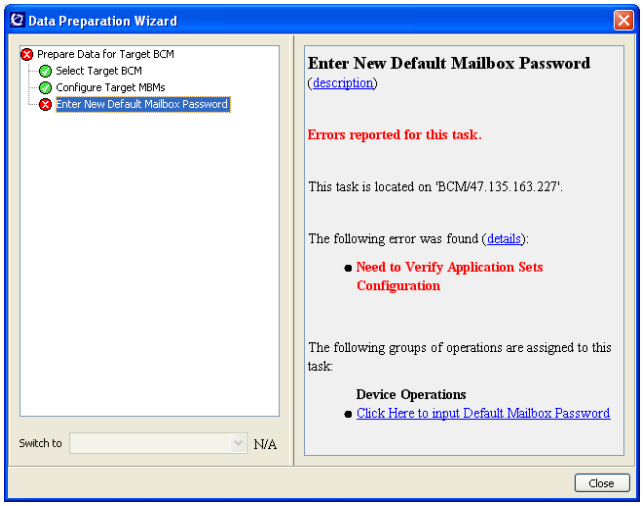

Data Preparation Wizard
Prepare Data for Target BCM
Select Target BCM
Configure Target MBMs
Enter New Default Mailbox Password
Switch to
N/A
Enter New Default Mailbox Password
(description)
Errors reported for this task.
This task is located on 'BCM/47.135.163.227'.
The following error was found (details):
Need to Verify Application Sets Configuration
The following groups of operations are assigned to this task:
Device Operations
Click Here to input Default Mailbox Password
Close

Figure 38 - Data Preparation Wizard Select Default Mailbox Password

The final step in this example illustration is to enter a new default Mailbox password for the *target* system. Click on "Enter New Default Mailbox Password" and then click on the "Click Here to input Default Mailbox Password" link. A new window will be presented showing the current Default Mailbox Password.

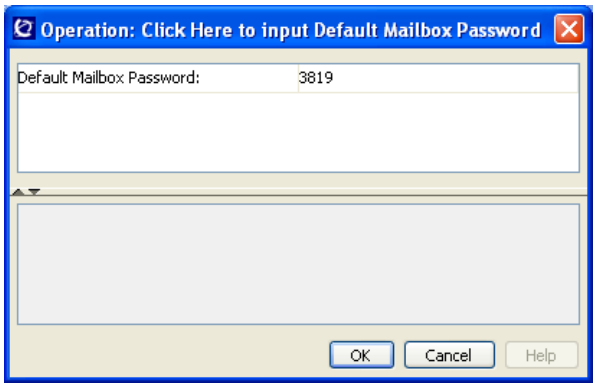


Figure 39 - Data Preparation Wizard Configure Default Mailbox Password

If it is necessary to change this password click inside the password field and enter a new value. DMM will validate the value entered.

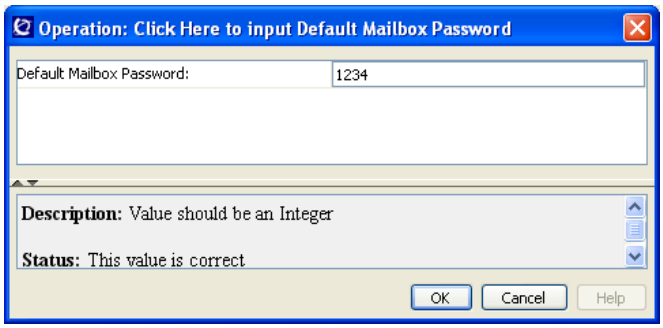


Figure 40 - Data Preparation Wizard Configure Changed Mailbox Password

Click the "OK" button to continue. Preparation results of the Default Mailbox password are shown.

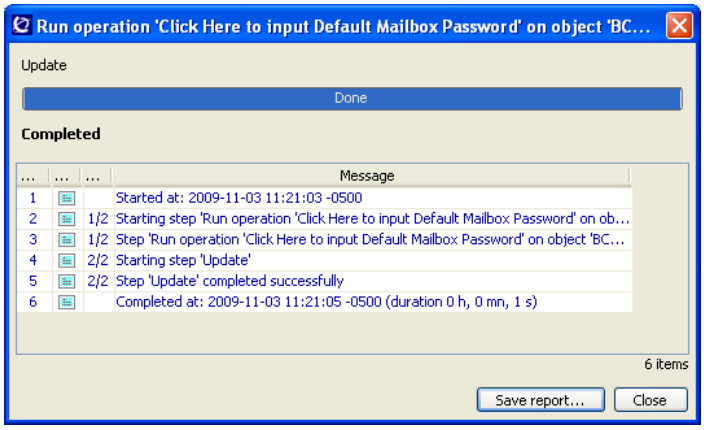

Run operation 'Click Here to input Default Mailbox Password' on object 'BC...
Update
Done
Completed
Message
1 Started at: 2009-11-03 11:21:03 -0500
2 1/2 Starting step 'Run operation 'Click Here to input Default Mailbox Password' on ob...
3 1/2 Step 'Run operation 'Click Here to input Default Mailbox Password' on object 'BC...
4 2/2 Starting step 'Update'
5 2/2 Step 'Update' completed successfully
6 Completed at: 2009-11-03 11:21:05 -0500 (duration 0 h, 0 mn, 1 s)
6 items
Save report...
Close

Figure 41 - Data Preparation Wizard Configure Mailbox Password Report

Click "Close" to return to the home window for the "Data Preparation Wizard".

Figure 42 - Data Preparation Wizard All data Prepared

Once all the necessary steps of the Data Preparation Wizard are successfully completed click “Close” to return to the DMM home window where all the sub-nodes should now be green.

5.4 Apply Data to *target*

After data is extracted or loaded and then prepared for a *target*, that data can be applied to the *target*.

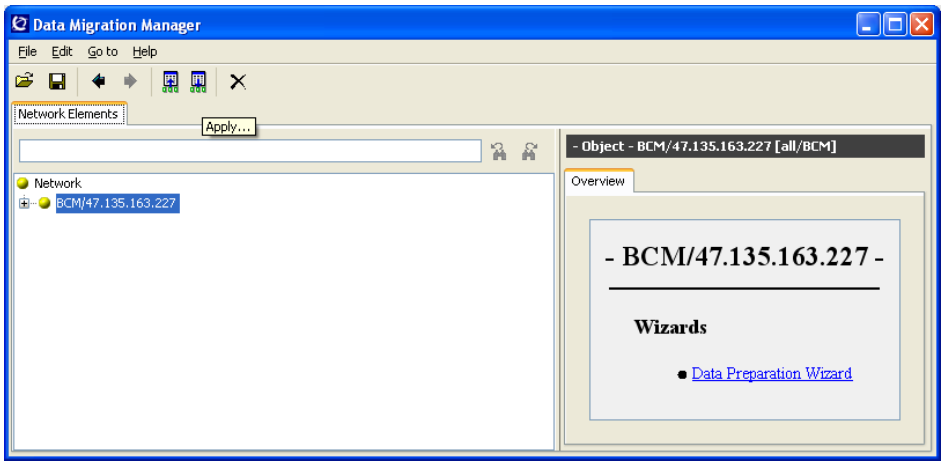


Figure 43 - DMM Home Window

To begin the apply to a *target* system press the icon. DMM will prompt the user with a window to select what ***source*** system is to be used for the apply.

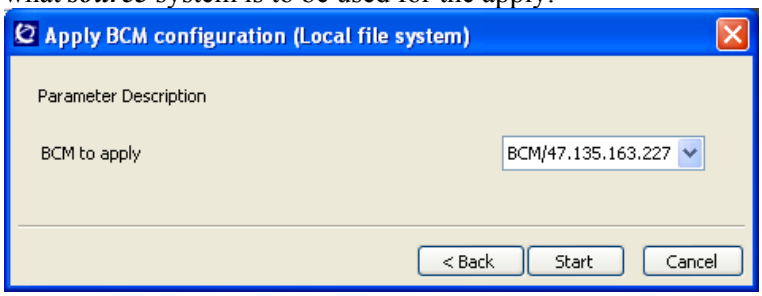


Figure 44 - Select the *source* of Data to Apply

Select the *source* system and click on "Start". DMM will then prompt for information about what ***target*** system the data is to be applied to.

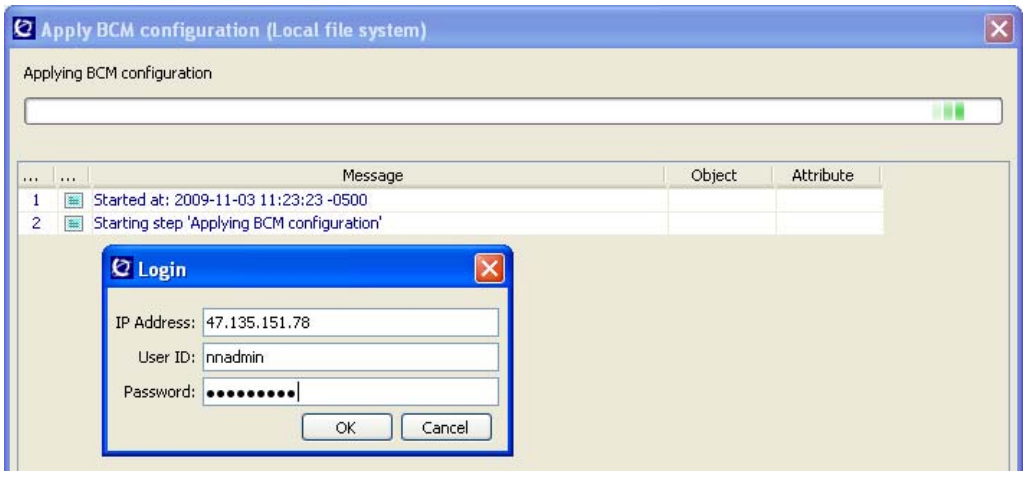


Figure 45 - Enter Address of *target* to Apply To

If DMM detects that the *source* and destination are not on the same subnet it will not alter the main LAN configuration of the *target* to match the *source*. This is to prevent possible loss of communication with the *target*. A confirmation dialog box will be shown if this is the case. It will be the responsibility of the administrator to alter the *target*'s LAN configuration information after the DMM migration is complete.

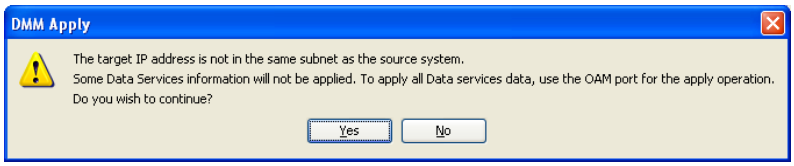

DMM Apply
The target IP address is not in the same subnet as the source system.
Some Data Services information will not be applied. To apply all Data services data, use the OAM port for the apply operation.
Do you wish to continue?
Yes
No

Figure 46 - IP/Lan Conflict Warning

The unattended Apply operation will begin. The process may take 45-90 minutes depending on the size of the data set to be migrated from the *source* to the *target*. In rare extreme cases (e.g., a large volume of voice-mail messages) the unattended Apply operation could take several hours.

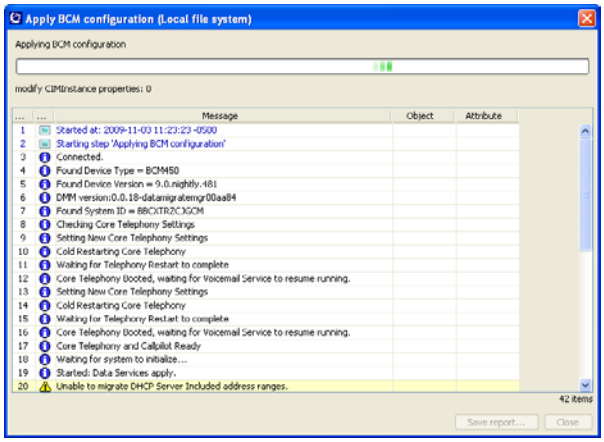

Apply BCM configuration (Local file system)
Applying BCM configuration
modify CIMInstance properties: 0
Message
Object
Attribute
Started at: 2009-11-03 11:23:23 -0500
Starting step 'Applying BCM configuration'
Connected.
Found Device Type = BCM450
Found Device Version = 9.0.nightly.481
DMM version:0.0.18-datamigratemgr00aa84
Found System ID = 88CXTR2CJGCM
Checking Core Telephony Settings
Setting New Core Telephony Settings
Cold Restarting Core Telephony
Waiting for Telephony Restart to complete
Core Telephony Booted, waiting for Voicemail Service to resume running.
Setting New Core Telephony Settings
Cold Restarting Core Telephony
Waiting for Telephony Restart to complete
Core Telephony Booted, waiting for Voicemail Service to resume running.
Core Telephony and Callpilot Ready
Waiting for system to initialize...
Started: Data Services apply.
Unable to migrate DHCP Server Included address ranges.
42 items
Save report...
Close

Figure 47 - Apply in Progress

Upon completion of the Apply, DMM will present a summary report of the Apply results.

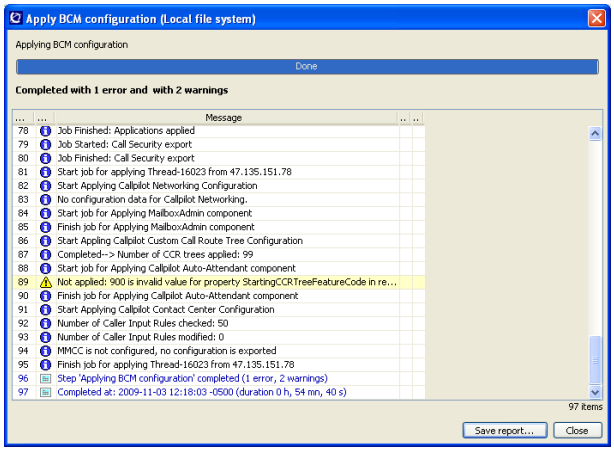

Apply BCM configuration (Local file system)
Applying BCM configuration
Done
Completed with 1 error and with 2 warnings
Message
Job Finished: Applications applied
Job Started: Call Security export
Job Finished: Call Security export
Start job for applying Thread-16023 from 47.135.151.78
Start Applying Callpilot Networking Configuration
No configuration data for Callpilot Networking.
Start job for Applying MailboxAdmin component
Finish job for Applying MailboxAdmin component
Start Appling Callpilot Custom Call Route Tree Configuration
Completed--> Number of CCR trees applied: 99
Start job for Applying Callpilot Auto-Attendant component
Not applied: 900 is invalid value for property StartingCCRTreeFeatureCode in re...
Finish job for Applying Callpilot Auto-Attendant component
Start Applying Callpilot Contact Center Configuration
Number of Caller Input Rules checked: 50
Number of Caller Input Rules modified: 0
MMCC is not configured, no configuration is exported
Finish job for applying Thread-16023 from 47.135.151.78
Step 'Applying BCM configuration' completed (1 error, 2 warnings)
Completed at: 2009-11-03 12:18:03 -0500 (duration 0 h, 54 mn, 40 s)
97 items
Save report...
Close

Figure 48 - Apply Completion Report

This report may be saved using the same method as described previously.

It is recommended that the DMM user examine the report results to determine what, if any, data elements were altered or not-transferred to the *target*. **Some amount of manual post-DMM adjustments to the *target* may be necessary.**

6.0 Using DMM – 5 Step Quickstart

1. Verify ***source*** and ***target compatibility*** and configuration issues and adjust accordingly (Appendix A) (5 minutes attended) – see section 4.0. Review section 7.0 of this document for known exceptions or limitations.

2. ***Extract*** data from *source* – see section 6.2
    a. Requires *source* IP address, administration user-id and password
    b. Choose what aspects to extract (default all) (2 minutes attended)
    c. Perform the *extract* (20-40 minutes unattended)
    d. Optionally save extracted data to a file (1 minute attended)

3. ***Prepare*** loaded data (5 minutes attended) - see section 6.6 and A.3
    a. Select *target* system type
    b. Declare MBM hardware
        i. *source* hardware type and bus
        ii. *target* DIPs
    c. Default Mailbox password

4. ***Apply*** to start migrating data to *target* (2 minutes attended) – see section 6.7
    a. Requires *target* IP address, administration user-id and password
    b. Choose the *source* system whose data you wish to use
    c. Choose the *target* system (IP, user, password) to apply the data to
    d. Resolve any LAN configuration issue(s) if presented.
    e. Start the *Apply* operation
    f. Apply will run until complete (Unattended operation approximately 30-60 minutes)
        i. The operation may take longer if large amounts numbers of voice-mail data are being migrated.

5. Perform any necessary ***remaining OA&M*** on the *target* to reach maximum migration result (5-30 minutes attended). Review section 7.0 again for known exceptions or limitations.

Total attended time, approximately 20-50 minutes.

Total unattended time, approximately 45-90 minutes.

7.0 DMM Exceptions or Limitations

In many cases DMM will be able to effect a 100% migration of data from the *source* to the *target*. However, there are some identified configurations for which DMM can not migrate 100% of the data from *source* to *target*.

For each DMM supported *source*/*target* migration path this section describes any limitations or configuration issues that may prevent DMM from achieving a 100% migration result.

It is recommended that Appendix A – System Compatibility be consulted to ensure that all *source*/*target* compatibility requirements have been met and understood before attempting to use DMM.

7.1 BCM 4.0 (200/400) to BCM 5.0 (450 chassis)

7.1.1 IP Sets Must be Re-registered to DNs on the *Target*

DMM migration to BCM5.0 will transfer the IP DNs and their programming, but the registration of the physical IP Sets to their respective DNs will need to be performed as a post-DMM step.

7.1.2 Line Numbers on CTM8/GATM8/8x16 MBMs Will Change

On the *target* BCM5.0 system there will *not* be a 4 line gap in the line numbering between the first set of 4 lines and the second set of 4 lines on an 8 line MBM. The second set of 4 lines on the MBM will be numbered contiguously from the first set of 4 lines.

This means that the second set of 4 lines on every 8 line MBM will have different line numbers on the *target* as compared to the original *source* system.

7.1.3 Some Programming Migration May Fail if "Hardware-Less" DNs are Referenced

On a BCM4.0 *source* DNs that reside on a bus for which a "Stn Mod" is not the "Prog Type" will not be re-created on a *target* BCM5.0 system. As a result, if on the *source* BCM4.0 system there were such DNs referenced in programming (e.g., as prime set, control set, direct dial set, etc.) then the attempt to migrate that programming onto the BCM5.0 system will fail because those DNs will not exist on the BCM5.0 system.

7.1.4 Call Forward All Calls Programming Not Migrated

If a DN on the *source* system is programmed to Call Forward All Calls to another destination this programming will not be migrated to the *target* system. This configuration must be performed manually post-DMM migration.

7.1.5 Doorphone Programming Not Migrated

No Doorphone programming of any type will be migrated from the *source* to the *target*. This configuration must be performed manually post-DMM migration.

7.1.6 Internal CAP Assignment Not Migrated

DMM will not currently migrate CAP / DN assignments. This programming must be performed manually post-DMM migration.

7.1.7 MBMs may Stop Functioning on *Source* After Extract

DMM will recommend that the *source* system be rebooted after an extraction completes. If this is not done it is possible, but not probable, that one or more MBMs may stop functioning until a BCM reboot is done.

7.1.8 Voice Mail Messages Not Migrated if Keycode(s) Not Present

DMM migration to BCM5.0 will not transfer VM messages to the *target* if there is insufficient licensing on the *target* to activate the *target*'s VM system. To ensure VM messages get transferred apply the appropriate Keycode(s) to the *target* before the DMM Apply process.

7.1.9 Default VM Password on the *Source* May Change

During the Extract process DMM will perform a backup of the *source* system. During extraction DMM will modify the default VM password on the *source* system per the Default Mailbox Password the DMM user chose during the extraction setup. As the final step in extraction DMM will restore the backed up data onto the *source* system. If this entire extraction process is interrupted in mid-operation it may happen that the *source* system's default VM password remains as the modified value.

7.1.10 Log Management and Backup Schedule Not Migrated

This service is expected to be provided in a future (TBD) version of DMM. This configuration must be performed manually post-DMM migration.

7.1.11 VM Mailbox Passwords on *Target* Set to Default

All mailbox passwords for the *target* BCM5.0 will be set to whatever the user has specified as the default password during the Data Preparation Wizard step.

7.1.12 Only Mailbox Prompts and Recorded Name Migrated

Only a mailbox's primary and secondary prompt and the recorded name will be migrated. All other mailbox specific configuration (i.e., configuration that cannot be accessed via mailbox manager) will not be migrated. This configuration must be performed manually post-DMM migration.

7.1.13 Call Centre Agent Passwords on *Target* Set to Default

All call centre agent passwords for the *target* BCM5.0 system are reset to the default value 0000 (4 zeros).

7.1.14 Fax Custom Cover Page Not Migrated

Fax Settings->Custom Cover Page is neither extracted nor applied. This configuration must be performed manually post-DMM migration.

7.1.15 Contact Center Reporting Server Password Not Migrated

Contact Center Properties->CC Reporting Server Password is neither extracted nor applied. This configuration must be performed manually post-DMM migration.

7.1.16 IVR Configuration and Applications Not Migrated

All IVR data is neither extracted nor applied. This configuration must be performed manually post-DMM migration.

7.1.17 Starting CCR Feature Code Can Not Be 900

On BCM 4.0 in the 'Auto-Attendant Properties->Starting CCR feature Code' property a value of 900 is a valid. However, this value is not a valid value for BCM5.5.

If the value for this property in BCM 4.0 is 900, a blank value will be entered in this field for BCM 5.0. A new value should be chosen for the BCM 5.0 post-DMM migration.

7.1.18 Obsolete Data Services Configuration Data Not Migrated

The following data services configuration elements are not migrated because they do not apply to a BCM 5.0 system:

- IPSec VPN
- NAT and Filters
- DNS
- Web Caching
- RIP / OSPF
- WAN Interfaces

Because these configuration elements do not exist on any BCM 5.0 platform they do not need to be considered post-DMM migration.

7.1.19 All User Account Passwords on *Target* Reset to System Default (PlsChgMe!)

All access and administration accounts migrated to the target will have their password reset to the BCM 5.0 default password “PlsChgMe!”. The “Change Password On Login” flag will be set so when users log in to the target they will be automatically prompted for a new password.

8.0 DMM Support

DMM is a free for use tool provided by Nortel. DMM support may not include the traditional support methods provided to Nortel products, but there are support resources for DMM available.

8.1 The DMM Forum

http://bcm.sipsw.com/ (Nortel BCM Forums) is a publically accessible informal support and discussion forum. Within this forum is a Data Migration Manager sub-forum.

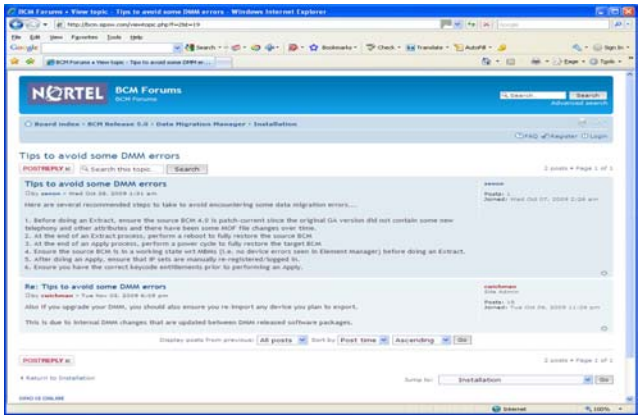


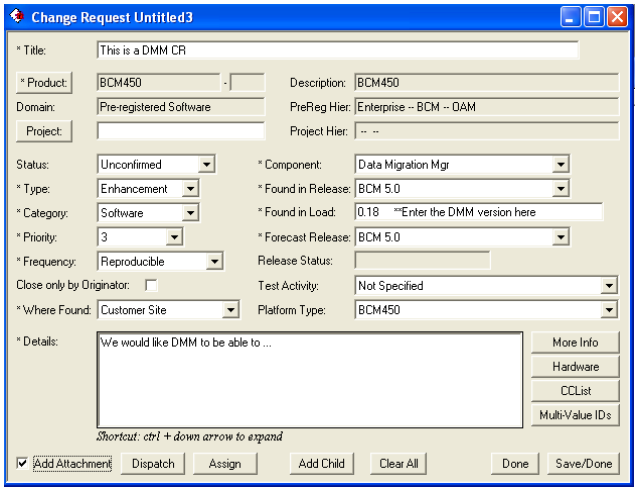
Figure 49 - The DMM Forum

This forum would be the place to start looking for advice on DMM or for posting your own questions or advice to others.

DMM's developers are continuously monitoring this forum and when/where possible will provide support to DMM-related issues. Content in the forum may also be used to continuously improve the DMM tool.

8.2 Reporting a Problem

If you have access to Nortel's Customer Report (CR) system, and a concern you have about DMM is not addressed on the forum, you may raise a CR for DMM. The example below illustrates the CR data required for a DMM CR. Text after any ** is not to be entered in a CR – this is additional CR guidance information only.



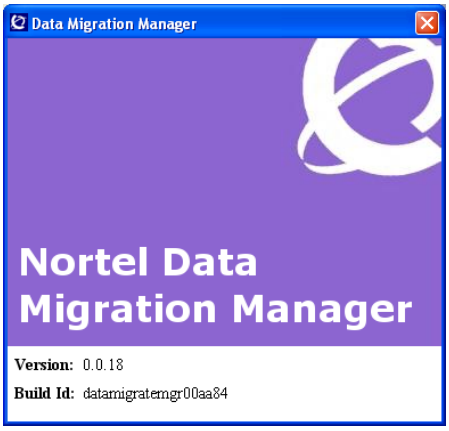


Figure 50 - DMM Customer Report (CR) Template

Note that you can determine the version of DMM you are using via the Help / About pull-down command.

Please attach the following data to a raised CR (where applicable):

- The saved .xcm file of the *source* data *extract*ed before the Data Preparation Wizard is run
- The saved *Extract* and/or *Apply* report .html file(s)
- The *source* h/w configuration information and a screenshot of the *source*/*target* hardware, bus, DIP configuration panel declared.
- DMM logs:
    - they will be found in the "logs" folder in the folder where DMM is installed
    - if using Application Launcher to run DMM; the logs directory will found in the <User Profile Directory>/.bcm/DMM
- Run-time logs from the post-*Apply target* BCM – collected using Element Manager

9.0 Glossary

The following is a list of terms and acronyms used in this document.

Table 3 - Glossary of Terms

Acronym	Full term
AA	Auto-Attendant
Apply	Program OA&M configuration on & transfer user data (voice msgs, prompts) to a target system
BCM	Business Communications Manager
DMM	Data Migration Manager – Graphical Windows PC Tool for migrating configuration and user data from one Nortel SMB platform to a Nortel SMB BCM platform
EM	Element Manager – Graphical Windows PC Tool for BCM OA&M
Extract	Collect OA&M configuration & user data (voice msgs, prompts) from a source system
LAN	Local Area Network
PC	Personal Computer
Source	The original system DMM is migrating data **from**
SU	Smart Update – a collection of software updates for a BCM
Target	The destination system DMM is migrating data **to**
VM	Voice-Mail

Appendix A - System Requirements and Compatibility

For each of the supported *source* systems that DMM supports there may be certain configuration requirements or non-supported configuration aspects.

A.1 Minimum Software Versions

Table 4 - BCM 4.0 *source* System Minimum S/W+ Patch Version Requirements

Nortel SMB Platform	S/W Version and Patch
BCM 200/400	BCM 4.0 GA + SU Oct 2009 - BCM.R400.SU.System.024-200910-1.0-1.0.zip

Table 5 - BCM 5.0 *target* System Minimum S/W+ Patch Version Requirements

Nortel SMB Platform	S/W Version and Patch
BCM 450 (2 or 4 MBM chassis)	BCM 5.0 GA + SU Nov 2009 - BCM450.R500.SU.System-001.200911

A.2 BCM 4.0 to BCM 5.0 Hardware Configuration Compatibility

The following table highlights how particular configuration aspects of a BCM 4.0 system will impact migration to a BCM 5.0 system.

Table 6 - BCM 4.0 to BCM 5.0 Hardware Configuration Considerations

BCM 4.0 Configured Option	BCM 5.0 Compatibility Impact
FEM	DMM does not support FEM migration to BCM 5.0. Using DMM on this *source* system will result in the equivalent MBMs being declared on the *target* system.
Co-Existing (same bus) BRI and Loop devices	Migration to BCM 5.0 will result in a requirement to split the BRI device(s) and the Loop device(s) onto unique buses on the 5.0. MBM Hardware declaration must declare the BRI and Loop devices to be destined for buses on the 5.0 system such that there are no BRI and Loop devices co-existing on the same bus (regardless of slot offset).
5/3 Bus Split	In this case the 7th bus on the BCM 4.0 system is "virtual" hardware declared for additional IP Set DNs to exist. Do NOT place a DSM32+ MBM hardware declaration on bus 7 in the MBM Hardware window. This entry must be left blank (set to Empty) in order for the associated IP Set DNs to be properly migrated to the *target* system.

A.3 BCM 4.0 to BCM 5.0 Capacity Compatibility

The following table highlights how particular capacity configuration aspects of a BCM 4.0 system will impact migration to a BCM 5.0 system.

Table 7 - BCM 4.0 to BCM 5.0 Capacity Considerations

Configured Option	Compatibility Impact
Greater than 130 lines configured.	Migration to BCM 5.0 will result in a reduction of line count to 130 or less. DMM will drop reduce IP Trunk line count first, and if necessary continue by removing DTM interfaces from the *source*'s data until 130 or fewer lines exist to be applied to the *target*.